

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A flexible sensor for wirelessly determining a physical property of a patient, which sensor comprises a self-contained resonant circuit comprising a capacitor and an inductor, and
wherein the circuit is variable in response to the physical property of the patient,
wherein the sensor is comprised of biocompatible materials, ~~and~~
wherein the sensor is sufficiently flexible to be folded for delivery percutaneously,
wherein the sensor is disk-shaped, and
wherein the sensor has an anchoring system attached to a flat surface of the sensor.
2. (Original) The sensor of Claim 1, wherein the capacitor is variable in response to the physical property of the patient.
3. (Original) The sensor of Claim 1, wherein the inductor is adapted to allow inductance of a current in the resonant circuit when the sensor is subjected to a time-varying electromagnetic field.

4. (Original) The sensor of Claim 1, wherein the physical property is pressure or temperature.

5. (Original) The sensor of Claim 4, wherein the physical property is pressure.

6. (Previously presented) The sensor of Claim 5, wherein sensor is designed to respond to a range of pressure corresponding to a range of pressure normally found within a vascular aneurysm.

7. (Previously presented) The sensor of Claim 5, wherein the sensor is designed to respond to a range of pressure corresponding to a range of pressure normally found in a chamber of the patient's heart.

8. (Canceled).

9. (Currently amended) The sensor of Claim ~~8~~ 1, wherein the sensor has one or more metallic members attached to a flat surface of the sensor.

10. (Currently amended) The sensor of Claim ~~8~~ 1, wherein the sensor has one or more metallic members layered within the sensor.

11. (Currently amended) The sensor of Claim ~~8~~ 1, wherein the sensor has a metallic ring surrounding a portion of the edge of the sensor.

12. (Canceled).
13. (Currently amended) The sensor of Claim 42 ~~1~~, wherein the anchoring system is a coil.
14. (Currently amended) The sensor of Claim 42 ~~1~~, wherein the anchoring system has radial projections in an umbrella shape.
15. (Currently amended) The sensor of Claim 1, wherein the sensor has at least one or more cutouts ~~cutout~~ to facilitate folding.
16. (Currently amended) The sensor of Claim 1, wherein the sensor ~~which~~ is capable of being folded into a Z-shape.
17. (Currently amended) The sensor of Claim 1, wherein the sensor ~~which~~ is capable of being folded into a U-shape.
18. (Original) The sensor of Claim 1, wherein a safety wire is attached to one surface of the sensor.
19. (Original) The sensor of Claim 18, wherein the safety wire has a sheath.
20. (Previously presented) The sensor of Claim 19, wherein the sheath is capable of being slid distally to free the safety wire from the sensor.

21. (Original) The sensor of Claim 18, wherein the safety wire is attached to the sensor at an adhesive point.
22. (Original) The sensor of Claim 21, wherein the adhesive point comprises an epoxy or a cyanoacrylate material.
23. (Original) The sensor of Claim 1, wherein the primary material of construction is flexible, biocompatible polymer or co-polymer.
24. (Original) The sensor of Claim 23, wherein the polymer or co-polymer is selected from the group consisting of polyamide, polyethylene terephthalate, polytetrafluoroethylene, and co-polymers thereof.
25. (Previously presented) The sensor of Claim 1, wherein there are no conductive connections or via holes to provide a direct electrical conduit between an upper inductor coil and a lower inductor coil.
26. (Currently amended) The sensor of Claim 1, ~~which contains~~ further comprising a non-linear element ~~and that~~ responds in a non-linear manner to an excitation signal.
27. (Previously presented) The sensor of Claim 1, wherein the capacitor comprises an array of smaller capacitors.
28. (Original) The sensor of Claim 1, wherein the sensor has a loading tab member.

29. (Currently amended) The sensor of Claim 1, wherein the sensor
~~which~~ is capable of being folded so that a middle section remains substantially
flat and the outer edges or surfaces are at substantially a 90° angle to said
middle section.

30. (Currently amended) The sensor of Claim 29, wherein the
sensor ~~which~~ is substantially daisy-shaped.

31. (Currently amended) A sensor delivery system comprising:
a sensor comprising a self-contained resonant circuit comprising a
capacitor and an inductor, wherein the circuit is variable in
response to the physical property of the patient, and wherein the
sensor is sufficiently flexible to be folded for delivery
percutaneously, and
a delivery catheter comprising an inner tubular member having an
outer surface and an outer tubular member having an inner
surface, the outer surface of the inner tubular member and the
inner surface of the outer tubular member defining an annular
space therebetween;
wherein the sensor is contained ~~in an~~ within said annular space
~~defined by the outer surface of the inner tubular member and the~~
~~inner surface of the outer tubular member.~~

32. (Currently amended) The delivery system of Claim 31, wherein the outer tubular member is ~~capable of being slid~~ slidable in the proximal direction to release the sensor.

33. (Original) The delivery system of Claim 31, wherein the delivery catheter has an atraumatic tip.

34. (Original) The delivery system of Claim 33, wherein the atraumatic tip is attached to the distal end of the inner tubular member.

35. (Currently amended) The delivery system of Claim 31, further comprising ~~which comprises~~ an annular stop proximal to the sensor in the annular space.

36. (Currently amended) The delivery system of Claim 31, wherein ~~there are one or more recesses~~ the annular space in the delivery catheter is configured such that several sensors can be contained within the catheter.

37. (Previously presented) The delivery system of Claim 31, wherein the sensor has a safety wire attached thereto and said safety wire extends proximally in a longitudinally extending groove in the inner surface of the outer catheter, the outer surface of the inner catheter, or both.

38. (Currently amended) The delivery system of Claim 31, wherein the sensor is one of a plurality of sensors, and wherein ~~which has more than one sensor~~ and each of said plurality of sensors is tuned to operate at a different resonant frequency.

39. (Canceled).

40. (Currently amended) The delivery system of Claim 38, ~~which has~~ wherein said plurality of sensors comprises two sensors.

41. (Currently amended) The delivery system of Claim 39 ~~which has~~ wherein said plurality of sensors comprises three sensors.

42. (Original) The delivery system of Claim 31, wherein the sensor is in a curved configuration within the delivery catheter.

43. (Currently amended) The delivery system of Claim 31, wherein the sensor is in a Z-shaped configuration within the delivery catheter.

44. (Currently amended) The delivery system of Claim 31, wherein the sensor is in a U-shaped configuration within the delivery catheter.

45. (Previously presented) The delivery system of Claim 31, wherein the inner catheter has a longitudinally extending lumen so that the delivery system is capable of being slidably positioned over a guidewire.

46. (Currently amended) A sensor delivery system comprising:

a sensor comprising a self-contained resonant circuit comprising a capacitor and an inductor, wherein the circuit is variable in response to the physical property of the patient, and wherein the sensor is sufficiently flexible to be folded for delivery percutaneously; and

a delivery catheter comprising an inner tubular member having an outer surface and an outer tubular member having an inner surface, the outer surface of the inner tubular member and the inner surface of the outer tubular member defining an annular space therebetween;

wherein the sensor is contained ~~in an~~ within the annular space ~~defined by the outer surface of the inner tubular member and the inner space of the outer tubular member,~~

wherein the sensor has a tab member that engages a reciprocal slot in the inner tubular member,

wherein the outer tubular member has a slit, and

wherein rotation of the inner tubular member causes the sensor to advance through the slit.

47. (Previously presented) The delivery system of Claim 46, wherein the inner catheter has a longitudinally extending lumen so that the delivery system is capable of being slidably positioned over a guidewire.

48. (Canceled).

49. (Canceled).